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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,198	07/14/2003	Abayomi I. Owei	CEDE 2111	6367
321 7	7590 08/16/2005		EXAM	INER
	POWERS LEAVITT	GREEN, ANTHONY J		
ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/619,198	OWEI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Anthony J. Green	1755			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed .s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 23 Ju	<u>ıne 2005</u> .				
2a) ☐ This action is FINAL. 2b) ☑ This	action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
Claim(s) 1-44,55-58 and 62-64 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) 64 is/are allowed.  Claim(s) 1,6-13, 26-40, 55-58 and 62-63 is/are rejected.  Claim(s) 2-5,14-25 and 41-44 is/are objected to.  Claim(s) are subject to restriction and/or election requirement.					
Application Papers		·			
9) ☐ The specification is objected to by the Examine	г.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct  11) The oath or declaration is objected to by the Ex		,			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 06/23/05.</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

Art Unit: 1755

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 June 2005 has been entered. Currently claims 1-44, 55-58 and 62-64 are currently pending.

## Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferrier (US Patent No. 5,869,130) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this

Art Unit: 1755

characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

4. Claims 1, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferrier et al (US Patent No. 6,020,029) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

5. Claims 1, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ferrier (US Patent No. 6,146,701) for the reasons set forth in the previous office action and which are herein incorporated by reference.

**Art Unit: 1755** 

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

6. Claims 1, 6, 10, 28-31 and 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Specification No. 60-149790.

The reference teaches, in the abstracts, a stripping solution composition comprising inorganic or organic acid, oxidizing agent, a corrosion inhibitor and a polyhydric alcohol such as ethylene glycol or propylene glycol etc. The examiner has requested a formal translation of the document which will be forwarded to applicant upon receipt.

The instant claims are met by the reference. While the reference does not recite that the composition is for adhesion promotion, It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to

Art Unit: 1755

the CLAIMED composition. <u>In re Spada</u>, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); <u>In re Fitzgerald</u>, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); <u>In re Swinehart</u>, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971). As for the properties, these properties are believed to be inherent since the composition is the same. Accordingly the instant claims are met by the reference.

7. Claims 62-63 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's own prior use and/or sale.

Applicant provides evidence in a declaration dated 09/12/03 that compositions like those disclosed in claims 62-63 were in public use. See paragraph 2 of the declaration in which a composition believed to meet these claims is discussed.

## Claim Rejections - 35 USC § 103

- 8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 9. Claims 7-9, 11-13, 26-27, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Specification No. 60-149790.

The reference was discussed previously.

The instant claims are obvious over the reference. While the reference does not teach the same alcohols as recited in instant claims 7-9, 12 and 26 it does broadly teach the use of polyhydric alcohols. Accordingly it is believed to be well within the level

**Art Unit: 1755** 

of ordinary skill in the art to use any type of well known polyhydric alcohol for the polyhydric alcohol of the reference without producing any unexpected results absent evidence showing otherwise. As for the amounts recited in claims 11, 13, 27 and 39, the reference teaches ranges of amounts that encompass or overlap the claimed amounts and accordingly these claims are obvious. One of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

<u>Also, In re Geisler</u> 43 USPQ2d 1365 (Fed. Cir. 1997); <u>In re Woodruff</u>, 16 USPQ2d 1934 (CCPA 1976); <u>In re Malagari</u>, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

10. Claims 1, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrier (US Patent No. 6,162,503) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the

composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

11. Claims 1, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrier (US Patent No. 6,383,272) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

Art Unit: 1755

12. Claims 1, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrier (US Patent No. 6,419,784) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

13. Claims 1, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrier (US Patent No. 6,503,566) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference

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Art Unit: 1755

clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

14. Claims 1, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrier (US Patent No. 6,554,948) for the reasons set forth in the previous office action and which are herein incorporated by reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

15. Claims 1, 28, 32-40, and 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montano et al (US Patent No. 6,752,878) for the reasons set forth in the previous office action and which are herein incorporated by reference.

As stated in previous office actions with respect to the type of acid, column 8, lines 1+, teach that nitric, sulfuric and other acids may be used as the type of acid. As

for the amounts of the components, the reference teaches the use of amounts that encompass that which is instantly claimed. The addition of a surfactant is suggested by the reference and one of ordinary skill in the art would find the specific type of surfactant a matter of obvious choice or design since no specific types are mentioned by the reference. The limitation of "for enhancing adhesion....board" is an intended use and as such, it adds little or no patentably weight to the claim. Ultimate intended utility does not make a composition patentable. See In re Pearson, 181 U.S.P.Q. 641. As for the properties of the composition, namely claims 28-31, these appear to be obvious and/or inherent properties possessed by the composition since the composition is the same. As for claim 43 while the reference does not specifically teach this composition, it does teach that this type of composition could be formulated based on the teachings of the types of components and the amounts suggested in the reference. Accordingly the instant claims are obvious over the reference.

Applicant argues that the claims are not met by the reference as the reference does not state "an alcohol which is effective to increase copper-loading in the composition" and "the alcohols are so markedly different from the alcohols which applicants demonstrate to be "effective to increase copper-loading" that there is no sound technical basis to conclude Ferrier's alcohols might inherently have this characteristic". To this argument the examiner respectfully disagrees. The reference clearly teaches polyethylene glycols as examples of the alcohols useable and applicant has not provided any evidence to the contrary which shows that polyethylene glycol will not function as an alcohol to increase copper loading in the composition.

16. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney, Jr. et al (US Patent No. 6,506,314 B1).

The reference teaches a composition comprising water, an oxidizing agent, an inorganic acid, a corrosion inhibitor and sulfonic acid or salt thereof (see especially column 7, lines 11-20).

The instant claim is obvious over the reference. As for the type of sulfonic acid, the reference teaches that the sulfonic acid is aromatic such as a benzene sulfonic acid and accordingly it would have been obvious to one of ordinary skill to substitute any well known aromatic benzene sulfonic acid absent evidence to the contrary. While the reference does not recite that the composition is for adhesion promotion, It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgeráld, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

17. Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fairweather et al (US Patent No. 6,036,758 B1).

The reference teaches a composition comprising an oxidizing agent, an inorganic acid, a corrosion inhibitor and sulfonic acid or salt thereof (see abstract and the claims).

The instant claim is obvious over the reference. As for the type of sulfonic acid, the reference teaches that the sulfonic acid is aromatic such as a benzene sulfonic acid and accordingly it would have been obvious to one of ordinary skill to substitute any well known aromatic benzene sulfonic acid absent evidence to the contrary. While the reference does not recite that the composition is for adhesion promotion, It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

#### Information Disclosure Statement

18. The references cited by applicant have been considered however they are not seen to teach and/or fairly suggest the instant invention.

## Allowable Subject Matter

- 19. Claim 64 is allowed.
- 20. Claims 2-5, 14-25, and 41-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/619,198 Page 13

Art Unit: 1755

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J.

Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony J. Green Primary Examiner Art Unit 1755

ajg August 04, 2005